INVERTER APPLICATION DOCUMENT REQUIREMENTS

D

This Checklist specifies the main application criteria for the CEC List of Approved Inverters and PCE. It is not an exhaustive list of all requirements. All application supporting documents will be reviewed by the CEC application assessor during the application process and feedback including requests for further information or updates to the documentation will be provided accordingly.

Standards Required
Please refer to the CEC Inverter Categories document for the required Inverter Standards

		Items to Check	**Y/N**	**Comments**
A		**Certificates of Suitability**		
1.0		Certifying Body is accredited by JAS-ANZ with the required Inverter Standards in Scope. (Certificates from electrical state regulators also accepted)		
2.0		Manufacturer/Certificate Holder name stated on Certificate. **Refer to Note 1**		
3.0		Certificate of Suitability shows Certificate Number.		
4.0		All Inverter (and PCE) Model Numbers listed on Application are covered by Certificate of Suitability. (The model numbers on Application must match model numbers stated on Certificate)		
	4.1	Co-Licenced products are required to have a different model number from the main licence holder.		
5.0		Certificate of Suitability states Inverters Rated Output Apparent Power (VA) and rated output current in (A). (Not Applicable to PCE)		
6.0		Certificate of Suitability is Valid and shows Certificate expiry date.		
7.0		Certificate of Suitability covers all Standards as required by Inverter Category.		
8.0		Brand/Trading names of inverters stated on Certificate of Suitability.		
	8.1	Brand names are owned by Certificate Holder. Alternatively Certificate Holder is authorised to used Brand Name.		

B		**Test Reports**		
1.0		Test Reports submitted for all Standards as required by Inverter Category.		
	1.1	For Co-Licenced products the Main Licence Test Reports may be accepted if JAS-ANZ Certifier has provided written confirmation of link between main licence and co-licence model numbers. **Refer to Note 2**		
	1.2	Test Reports should show the inverter/PCE have been evaluated to all the applicable clauses of the required Standards.		
2.0		Test Lab is accredited to ISO/IEC 17025 with required Inverter Standards in Scope.		
3.0		Any documentation from the Certifier confirming the test report numbers used to issue Certificate of Suitability should also be submitted to the CEC. Alternatively, the CEC will email the Certifier for confirmation of the Test Report numbers used to issue the Certificate of Suitability.		
4.0		All Inverter (and PCE) Model Numbers listed on application are covered by Test Reports submitted.		
5.0		All Supplementary documents to the Test Reports are submitted – CDF, Photos, etc.		
6.0		If AS/NZS 4777.2:2020 Test Report references a Product Certificate for integrated PV Isolators to AS 60947.3, please also provide a copy of the Product Certificate.		
C		**Integrated BESS**		
1.0		If inverter contains an internal battery unit (Integrated BESS) then a Certificate and Test Report to IEC 62619 or UL 1973 for the internal battery unit or the BESS is required.		
D		**Product Label**		
1.0		Inverter Product Label for the Australian Market should meet the following criteria: ☐ Label states Brand name (as per Certificate of Suitability) ☐ Label states model number name (as per Certificate of Suitability)		

		☐ Label ratings matches ratings stated on Certificate of Suitability and Test Reports (Inverters compliant with AS/NZS 4777.2:2020 should have the output power rating specified as Rated Apparent Power (VA)) ☐ Label states inverter Topology ☐ Label states inverter Overvoltage Category ☐ Label state inverter IP Rating *Assessment will be conducted based on the label shown in the Test Reports. If the labels used for the Australian Market are different from the labels in the test reports, please provide a sample label		
E		**Installation Manual**		
1.0		Installation Manual(s) submitted is for all model numbers listed on application.		
2.0		Installation Manual has information for: • Safe handling of inverter • Safe transport of inverter • Inverter installation location requirements • Instructions on how to mount inverter • Minimum clearances required around inverter including any ventilation requirements • Description/Picture of available terminals and ports including comms ports • Instructions for electrical installation of inverter including PV/DC connections and AC connections • Instructions on how to ground inverter • Installation Manual specifies the type and rating of external residual current devices (RCD) compatible with inverter (for where an external RCD is required by Australian Installation Standards) • Instructions on how to commission inverter • Installation Manual contains information on shutdown procedure • Installation Manual contains information on inverter maintenance requirements* • Instructions for setting up remote monitoring if available*		

		• Information on how the inverter can comply with the Earth Fault alarm requirements of AS/NZS 5033* *This information can be available in a separate application/technical note document which should be submitted to the CEC as part of the application supporting documents		
3.0		For inverters compliant to AS/NZS 4777.2:2020 the following information should be available in the installation manual or in a separate application/technical note document: • Instructions for how to view inverter firmware version • Available inverter DRM response modes and how to connect the DRED (demand response enabling device) to the inverter • Instructions on how to select/activate country grid code, protection settings, power quality response modes, and region settings as per AS/NZS 4777.2:2020 during inverter commissioning **Refer to Note 3** • Instructions on how to view country grid code, protection settings, power quality response modes, and region settings after inverter commissioning **Refer to Note 3** • Whether the inverter can be used in multiple inverter combinations as per Section 5 of AS/NZS 4777.2:2020 • Instructions on how to set up Generation limit and Export limit control is available as per AS/NZS 4777.2:2020 ○ Should include instructions on how to connect any external measuring device/controller and also instructions on how to adjust limit settings		
4.0		For inverters with battery ports that are compatible with lead-acid batteries, the following information should be available in the installation manual: • Whether a remote battery temperature sensor is supplied with the inverter. • Instructions for how to connect remote battery temperature sensor.		
5.0		For inverters with battery ports that are compatible with lithium batteries, the following information should be available in the installation manual:		

		• Instructions on how to connect battery BMS interface to inverter		
6.0		For multiple mode inverters the Installation Manual should indicate whether neutral continuity is maintained internal to inverter or whether external connections are required. If external connections as part of inverter installation is required to maintain neutral continuity, then Installation Manual should contain instructions on connections required. (This should include Wiring Diagrams/Schematics)		
7.0		Technical data in installation manual matches data stated on Certificate and Test Reports		
	7.1	Manual should include the following information • Environmental category (Outdoor, Indoor – unconditioned, Indoor – conditioned) • Pollution degree classification (should have a minimum of IP44 for outdoor installation) • Overvoltage category for each port (optional if available on datasheet) • Values of backfeed short-circuit currents available from each port under fault conditions if they exceed the maximum rated current for the port (Check IEC 62109-1:2010 test report Clause 4.4.4.6 and Clause 5.3.2 j) • The maximum short circuit current value available from the energy source for each input (PV, mains, battery ports)		
8.0		Any warranty information stated in the installation manual is consistent with information stated in Warranty T&Cs.		
F		**Datasheet**		
1.0		Datasheet(s) covers all model numbers listed on application.		
2.0		Technical data on datasheet matches data stated on Certificate and Test Reports.		
3.0		Datasheet states the inverter Series name.		
4.0		Datasheet has the following technical information: • Rated Output Apparent Power (VA) • Rated Output Current (A) • Max Input DC Voltage (V) • Min Input DC Operating Voltage Range (V) • Input Start-up Voltage (V) • MPPT Voltage range (V) – for PV Inverters only • Max MPPT input current and Max MPPT short circuit current (A) • Max input PV Power (For PV inverters only)		

		• Operating temperature range • IP Rating • Maximum Altitude (Optional if available in installation manual) • Inverter Max Efficiency • Inverter Overvoltage category for all ports • Inverter Protective Class • Inverter Method of Active Anti-Islanding		
5.0		For inverters compatible with batteries datasheet should show the types (Chemistry) of batteries the inverter is compatible with.		
6.0		Datasheet states country of manufacture/assembly.		
7.0		Any warranty information stated in the datasheet is consistent with information stated in Warranty T&Cs.		
G		**Warranty T&Cs**		
1.0		Warranty Terms and Conditions covers all model numbers on application.		
2.0		Warranty Terms and Conditions Document contains Mandatory Text as per Australian Consumer Law. **Refer to Note 4**		
3.0		Warranty Terms and Conditions contains contact information for manufacturer.		
4.0		Warranty Terms and Conditions contains contact information for Australian Importer(s).		
	4.1	Alternatively, there can be 1 version of the Warranty Terms and Conditions document containing only the contact information for manufacturer and another Warranty Terms and Conditions document per importer contain contact information for manufacturer and importer		
H		**Responsible Supplier Requirements**		
1.0		All importers to register as a responsible supplier in the EESS database https://www.eess.gov.au/responsible-supplier/registed-responsible-suppliers/ **Refer to Note 5**		
2.0		All importers to register on EESS database under their Responsible Supplier Number the inverter or PCE model numbers they will import		

3.0		All importers to register on EESS database under their Responsible Supplier Number the integrated PV Isolators as level 3 equipment https://www.eess.gov.au/registration/registration-in-scope-electrical-equipment/level-3/		

Documents Required for the Application:

- Certificate of Suitability
- Test Reports for all required Standards
- Installation Manual (including any supplementary documents required to meet the application requirements)
- Datasheet(s)
- Warranty T&Cs document

Note 1 – Manufacturer/Certificate Holder Name

The CEC List of Approved Inverters and PCE on the CEC Website displays the Certificate holder name and model numbers as stated on the Certificate of Suitability. The website list does not currently display the brand name.

Note 2 Co-licenced Products

A product manufacturer may enter into a Co-Licence agreement to allow another company to sell their equipment under their own brand. A Co-licence product is identical equipment sold under a different brand with the agreement of the original product manufacturer.

Where an application is submitted for a Co-Licence product, a Certificate for the Co-Licence product must be issued with the Co-Licence holder company name, brand and model number. Co-Licence products cannot have the same model number as the original/main licence holder.

Where the Co-License holder has provided test reports for the device under the brand and model of the main licence holder CEC will require the Certifier to provide written confirmation of the equivalent model numbers between the two brands, and that the test reports provided by the applicant are the same test reports used for the issue of the co-licence certificate.

Note 3 – Inverter Operational and Protection Settings

AS/NZS 4777.2:2020 requires operational and protection settings to be set to view only after commissioning to prevent inadvertent or unauthorised changes. Installation Manual should show:

- How to view settings after inverter has been commissioned

- How to obtain tool/password/special instructions in order to change settings after commissioning.
    - Passwords to change settings should not be readily available. The installation manual should not include the password to change settings. This should be either obtained from the manufacturers/importer or located in a separate maintenance document.

Note 4: Australian Consumer Law Mandatory Wording

It is a requirement of Australian Consumer Law that a document evidencing a warranty against defects must include mandatory text to ensure consumers are aware that any warranty against defects operates in addition to consumers' rights under the ACL. The mandatory text for the supply of goods is:

> Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure

The mandatory text must be written as stated above. No changes to the wording or format are allowed (i.e. do not change "Our goods …" to "Our products….".

For more details please refer to ACCC website:
https://www.accc.gov.au/business/treating-customers-fairly/offering-warranties/warranties-against-defects

Note 5: Importers and Responsible Suppliers

The following definitions are taken from https://www.eess.gov.au/responsible-supplier/manufacturers-and-importers-responsible-suppliers/

- Responsible Supplier – is a legally identifiable Australian or New Zealand entity or person who manufactures or imports in-scope electrical equipment in Australia or New Zealand (first supplier).

- Manufacturer is the person/company with a business presence in Australia/New Zealand who manufactures (the entity who owns or runs the physical location where the end product is produced or assembled) in-scope electrical equipment.

- Importer is the person/company with a business presence in Australia/New Zealand who is the first person/company in Australia/New Zealand in the supply chain responsible for in-scope electrical equipment coming into the Australian market. It is irrelevant for this definition as to who actually organises the equipment's passage through the Australian customs process (who signs declarations, pays duty fees, etc.) or where the product may be stored and shipped from.